

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR 2003/002419

## CLASSIFICATION OF SUBJECT MATTER

IPC<sup>7</sup>: F04B 35/04, 49/06; F25B 1/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC<sup>7</sup>: F04B, F25B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, EPODOC, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages             | Relevant to claim No. |
|----------|--|-----------------------|
| A        | WO 2001/054253 A1 (LG ELECTRONICS) 26 July 2001 (26.07.2001)<br><i>claims 1-10; fig. 4-9.</i>  | 1,7,9                 |
| A        | US 2003/0177773 A1 (KIM) 25 September 2003 (25.09.2003)<br><i>claims 1,4,12; fig. 4-7.</i>     | 7,9                   |
| A        | US 6527519 B2 (HWANG et al) 4 March 2003 (04.03.2003)<br><i>claims 1,12; fig. 2-5.</i>         | 7,9                   |
| A        | US 2003/0026702 A1 (YOO et al) 6 February 2003 (06.02.2003)<br><i>fig. 2-7; claims 1,8,13.</i> | 7,9                   |
| ----     |  |                       |

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

## \* Special categories of cited documents:

„A“ document defining the general state of the art which is not considered to be of particular relevance

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„X“ document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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„&amp;“ document member of the same patent family

Date of the actual completion of the international search

9 July 2004 (09.07.2004)

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Name and mailing address of the ISA/AT

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Reference signs in parentheses should be inserted in the claims to increase their intelligibility (Rule 6.2b PCT).

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR 03/02419-0

| Patent document cited<br>in search report |   |                 | Publication<br>date | Patent family<br>member(s) |   |            | Publication<br>date |
|---|---|-----------------|---------------------|----------------------------|---|------------|---------------------|
| US  | A | 20030026<br>702 |                     | none                       |   |            |                     |
| US  | A | 20030177<br>773 |                     | none                       |   |            |                     |
| US  | B | 6527519         | 2003-03-04          | KR                         | A | 2002041983 | 2002-06-05          |
|   |   |                 |                     | KR                         | A | 2002041982 | 2002-06-05          |
|   |   |                 |                     | BR                         | A | 0105524    | 2002-09-24          |
|   |   |                 |                     | JP                         | A | 2002213367 | 2002-07-31          |
|   |   |                 |                     | CN                         | A | 1356473    | 2002-07-03          |